

Abstract of the Disclosure

A method and system for estimating the amount of forward displacement undergone by a seat-belted occupant of a vehicle. A test dummy, representing the seat-belted occupant, is pivotably restrained at a first point with respect to a fixed frame of reference. A second point associated with the test dummy is subsequently subjected to a measurable amount of forward displacement with respect to the same frame of reference, causing the test dummy to lean or tilt forward. An amount of forward displacement that occurs at a third point on or adjacent to the test dummy is then estimated through the use of ratios.